

IN THE CLAIMS:

Please cancel claims 31-43 without prejudice or disclaimer as to the subject matter recited therein.

Please amend the claims as shown in the following claims listing.

1. (Previously presented) A system, comprising:
a node including one or more active devices, an interface, and an address network configured to transmit address packets between the one or more active devices and the interface; and
an additional node coupled to the node by an inter-node network, wherein the additional node includes an additional address network;
wherein a given active device having an ownership responsibility for a coherency unit is configured to respond to certain access right requests;
wherein in response to receiving from the additional node via the inter-node network, a coherency message requesting an access right to a coherency unit, the interface is configured to send a first type of address packet on the address network if a global access state of the coherency unit in the node is a modified state and to send a second type of address packet on the address network if the global access state of the coherency unit in the node is not the modified state; and
wherein if the given active device has an ownership responsibility for the coherency unit, the given active device is configured to ignore the second type of address packet and to respond to the first type of address packet.
2. (Original) The system of claim 1, wherein the additional node includes an additional active device and an additional interface configured to send and receive coherency messages on the inter-node network, wherein the additional address network is configured to transmit address packets between the additional active device and the additional interface.

3. (Previously presented) The system of claim 2, wherein the coherency message requests a read access right to the coherency unit, wherein the first type of address packet is a proxy read-to-share-modified packet and wherein the second type of address packet is a proxy read-to-share packet.
4. (Previously presented) The system of claim 3, wherein if the given active device has an ownership responsibility for the coherency unit, the given active device is configured to send data corresponding to the coherency unit to the interface in response to receipt of the proxy read-to-share-modified packet.
5. (Previously presented) The system of claim 4, wherein if the given active device has an ownership responsibility for the coherency unit, the given active device is configured to transition an ownership responsibility for the coherency unit upon receipt of the proxy read-to-share-modified packet.
6. (Previously Presented) The system of claim 3, wherein the node includes a memory subsystem configured to send data corresponding to the coherency unit to the interface in response to the proxy read-to-share packet.
7. (Original) The system of claim 2, wherein the coherency message requests a write access right to the coherency unit, wherein the first type of address packet is a proxy read-to-own-modified packet and wherein the second type of address packet is a proxy read-to-own packet.
8. (Previously presented) The system of claim 7, wherein if the given active device has an ownership responsibility for the coherency unit, the given active device is configured to transition an ownership responsibility for the coherency unit upon receipt of the proxy read-to-own-modified packet and to send data corresponding to the coherency unit to the interface in response to receipt of the proxy read-to-own-modified

packet, wherein the given active device transitions an access right to the coherency unit upon sending the data.

9. (Original) The system of claim 7, wherein the node includes a memory subsystem configured to send data corresponding to the coherency unit in response to the proxy read-to-own packet.

10. (Original) The system of claim 2, wherein the address packet is an invalidating address packet, wherein the first type of address packet is a proxy invalidate-modified packet and wherein the second type of address packet is a proxy invalidate packet.

11. (Previously presented) The system of claim 10, wherein if the given active device has an ownership responsibility for the coherency unit, the given active device is configured to transition an ownership responsibility for the coherency unit upon receipt of the proxy invalidate-modified packet and to send data corresponding to the coherency unit to the interface in response to receipt of the proxy invalidate modified packet, wherein the given active device is configured to transition an access right to the coherency unit upon sending the data.

12. (Previously presented) The system of claim 10, wherein if the given active device does not have an ownership responsibility for the coherency unit and has an access right to the coherency unit, the given active device is configured to transition the access right to the coherency unit to an invalid access right upon receipt of the proxy invalidate packet.

13. (Original) The system of claim 2, wherein the address network is configured to convey the first and second types of address packet from the interface to a directory in point-to-point mode.

14. (Original) The system of claim 2, wherein the address network is configured to convey the first and second types of address packet from the interface in broadcast mode.

15. (Previously presented) A node for use in a multi-node system, the node comprising:

a plurality of devices including a memory subsystem, one or more active devices, and an interface configured to send and receive coherency messages on an inter-node network coupling nodes in the multi-node system; and an address network configured to communicate address packets between the plurality of devices;

wherein a given active device having an ownership responsibility for a coherency unit is configured to respond to certain access right requests;

wherein in response to receiving a coherency message on the inter-node network requesting an access right to a coherency unit, the interface is configured to send a first type of address packet on the address network if the coherency unit is in a modified global access state in the node and to send a second type of address packet on the address network if the coherency unit is not in the modified global access state in the node; and

wherein if the given active device has an ownership responsibility for the coherency unit, the given active device is configured to ignore the second type of address packet and to respond to the first type of address packet.

16. (Previously presented) The node of claim 15, wherein the coherency message requests a read access right to the coherency unit, wherein the first type of address packet is a proxy read-to-share-modified packet and wherein the second type of address packet is a proxy read-to-share packet.

17. (Previously presented) The node of claim 16, wherein if the given active device has an ownership responsibility for the coherency unit, the given active device is configured to send data corresponding to the coherency unit to the interface in response to receipt of the proxy read-to-share-modified packet.

18. (Previously presented) The node of claim 17, wherein if the given active device has an ownership responsibility for the coherency unit, the given active device is configured to transition an ownership responsibility for the coherency unit upon receipt of the proxy read-to-share-modified packet.

19. (Previously Presented) The node of claim 16, wherein the memory subsystem is configured to send data corresponding to the coherency unit to the interface in response to the proxy read-to-share packet.

20. (Original) The node of claim 15, wherein the coherency message requests a write access right to the coherency unit, wherein the first type of address packet is a proxy read-to-own-modified packet and wherein the second type of address packet is a proxy read-to-own packet.

21. (Previously presented) The node of claim 20, wherein if the given active device has an ownership responsibility for the coherency unit, the given active device is configured to transition an ownership responsibility for the coherency unit upon receipt of the proxy read-to-own-modified packet and to send data corresponding to the coherency unit to the interface in response to receipt of the proxy read-to-own-modified packet, wherein the given active device transitions an access right to the coherency unit upon sending the data.

22. (Original) The node of claim 20, wherein the memory subsystem is configured to send data corresponding to the first coherency unit in response to the proxy read-to-own packet.

23. (Original) The node of claim 15, wherein the address packet is an invalidating address packet, wherein the first type of address packet is a proxy invalidate-modified packet and wherein the second type of address packet is a proxy invalidate packet.

24. (Previously presented) The node of claim 23, wherein if the given active device has an ownership responsibility for the coherency unit, the given active device is configured to transition an ownership responsibility for the coherency unit upon receipt of the proxy invalidate-modified packet and to send data corresponding to the coherency unit to the interface in response to receipt of the proxy invalidate modified packet.

25. (Previously presented) The node of claim 23, wherein if the does not have an ownership responsibility for the coherency unit and has an access right to the coherency unit, the given active device is configured to transition the access right to the coherency unit to an invalid access right upon receipt of the proxy invalidate packet.

26. (Previously presented) The node of claim 15, wherein the interface includes a global access state cache indicating a global access state within the node of each of a plurality of recently accessed coherency units for which the node is a home node.

27. (Original) The node of claim 26, wherein the interface is configured to check the global information cache included in the interface for the global access state of the coherency unit in the node, wherein if the global access state of the first coherency unit is not included in the global information cache, the first interface is configured to request the global access state of the first coherency unit in the node from the memory.

28. (Previously presented) The node of claim 15, wherein a global access state of the coherency unit in the node is indicated in the communication from an additional node.

29. (Original) The node of claim 15, wherein the address network is configured to convey the first and second types of address packet from the interface to a directory in point-to-point mode.

30. (Original) The node of claim 15, wherein the address network is configured to convey the first and second types of address packet from the interface to the plurality of devices in broadcast mode.

31-43. (Cancelled.)

44. (Previously presented) A system, comprising:

means for communicating coherency messages between a plurality of nodes;

a node included in the plurality of nodes, wherein the node includes a plurality of

devices and means for communicating address packets between the

plurality of devices, wherein the plurality of devices includes one or more

active devices and means for sending and receiving coherency messages

on the means for communicating coherency messages; and

an additional node included in the plurality of nodes;

wherein a given active device having an ownership responsibility for a coherency

unit is configured to respond to certain access right requests;

wherein in response to receiving a coherency message requesting an access right

to a coherency unit via the means for communicating coherency messages

between the plurality of nodes, the means for sending and receiving

coherency messages sends a first type of address packet on the means for

communicating address packets if a maximum allowable access right of

the plurality of devices to the coherency unit is write access and sends a

second type of address packet on the means for communicating address

packets if the maximum allowable access right of the plurality of devices

to the coherency unit is not write access; and

wherein if the given active device has an ownership responsibility for the

coherency unit, the given active device is configured to ignore the second

type of address packet and to respond to the first type of address packet.